Autumnwood ESH Consultants, LLC
6539 Autumnwood Court
Mount Pleasant, Wisconsin 53403
Phone: 262.237.1130

5 December 2014

Mr. John Nordine
U.S. EPA Region 5
RCRA Enforcement and Compliance Assurance Branch (LU-9J)
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois Monthly Progress Report for November 2014

Dear Mr. Nordine:

Enclosed please find the Monthly Progress Report for the Central Wire facility located in Union, Illinois for the month of November 2014.

The eDMR for the groundwater pump and treat facility and the laboratory analytical reports, which includes the effluent data used in the eDMR for November 2014 and the fall semiannual groundwater monitoring well and residential well sampling event are also attached to this report.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

Autumnwood ESH Consultants, LLC

John W. Thorsen, P.E.

JWT:jt

encl

cc:	Joyce Munie	IEPA
	Robert Kay	USGS
	Thomas Hanewald	Central Wire
	Gerald W. Ruopp	Central Wire
	Robert Johnson	Central Wire

MONTHLY PROGRESS REPORT
Central Wire Union, Illinois Site
November 2014

1. **Progress Made This Reporting Period** – This reporting period Central Wire continued the operation and maintenance of the groundwater extraction and treatment system. Central Wire treated an average of 412,000 gallons per day with a maximum daily flow of 449,000 gallons per day and met effluent limitations for pH, 1,1,1-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for November 2014 is attached to this report.

During November the wells, pumps and force mains were cleaned and rehabilitated to increase the flow through the groundwater pump and treat system by Water Well Solutions of Oconomowoc, WI.

The laboratory analytical report noted that the groundwater pump & treat effluent samples arrived at the lab on November 11, 2014 at 0.9° C.

The Ex. 6 Personal Privacy (PP) well ran for a total of 1 hour from November 3 to December 3, 2014. The Route 176 pump did not run during this period and the diesel engine was put in storage on November 10, 2014. The Ex. 6 Personal Privacy (PP) pump ran only one hour during this period and the diesel engine was put in storage on 11/24/2014.

Summary of 2014 Irrigation Pumping Hours per Week at Ex. 6 Personal Privacy (PP) (November 3 through December 3, 2014)

Date of Hour Meter Reading	Ex. 6 Personal Privacy (PP) Pump		Ex. 6 Personal Privacy (PP) Pump	
	Hour Meter Reading	Hours Pumped	Hour Meter Reading	Hours Pumped
11/3/2014	5454	0	3245	0
11/10/2014	5454	0	3245	0
11/17/2014	5454	0	3245	0
11/24/2014	5454	0	3246	1
12/3/2014	5454	0	3246	0
Totals		0		1

The groundwater level monitoring data from downgradient monitoring well DGW-2I continues to be collected. The table of recorded groundwater levels between November 3 and December 3, 2014 is attached to this report. Water levels ranged from a low on December 1, 2014 of 813.840 feet above mean sea level to the high on November 24, 2014 of 815.643 feet, a range of 1.803 feet. The graphs showing the variation in water elevations over time vs. precipitation per day and vs. hours of irrigation wells pumped per week is embedded in this table.

Since the diesel engines driving the irrigation well pumps have been put into storage for the winter, as in past years, Central Wire will cease reporting on groundwater elevations

until the pumps are reactivated in the spring of 2015. Central Wire has left a water level recorder in monitoring well DGW-2I and reset the recorder to collect the groundwater level measurements every hour.

EPA requested that Central Wire identify the leading edge of the chlorinated groundwater plume in 2014. Samples were collected during the week of October 27, 2014. Sample data and tables and plots of the analytical results from the samples exceeding the EPA Maximum Contaminant Limits (MCLs) were submitted to EPA on November 14, 2014 and comments were received from U.S. EPA on November 18, 2014. Central Wire has discussed comment no. 3 regarding the fact that there is no well immediately downgradient from GP-8 (which has values exceeding the MCLs) and has agreed to place a well 150 feet downgradient (northwest) of GP-8. In a discussion of the EPA comments with Central Wire during the week of November 24, 2014, EPA indicated they will require another Geoprobe downgradient from GP-19. During this discussion Central Wire proposed additional Geoprobes with sampling at 27 feet, 57 feet and 85 feet below ground surface at points approximately 150 feet northwest of GP-8 and approximately 150 feet north of GP-19 which seemed agreeable to EPA. Central Wire will respond to the EPA comment letter and detail this proposed response to comment 3.

Per EPA's request, the fall 2014 semiannual RCRA CMI groundwater and residential well sampling event took place at the same time as the Geoprobe sampling, on October 27th and 28th. These samples arrived at the laboratory at 0.4° F. The analytical results are discussed below and the laboratory analytical report is attached to this Monthly Progress Report.

2. **Summary of Validated Data and Results** – The monthly effluent sampling took place on October 23, 2014. The permit limitations and analytical results are shown below.

Central Wire Union Illinois Pump & Treat Discharge Analytical Results

Parameter	Effluent Limitation (Daily Maximum, ug/L)	November 2014 Analytical Results, ug/L
1,1,1-Trichloroethane	20	0.64 J
Trichloroethene	20	0.90 J
Tetrachloroethene	20	0.64 J

J = Result was less than the reporting limit but greater than or equal to the method detection limit.

The November analytical report is attached to this Monthly Progress Report.

In addition, the fall semiannual RCRA CMI groundwater and residential well sampling event was conducted on October 27th & 28th. The results/trends are summarized below. The historical data, plots of that data and laboratory report are attached to this report.

In monitoring well MW-2, no Environmental Protection Agency (EPA) Maximum Contaminant Limits (MCL) have been exceeded since December 2007. In MW-4,

Tetrachloroethene (PCE) has been exceeded since monitoring began in 1995 and since 2010 has ranged between 21 and 70 micrograms per liter (ug/L). The Trichloroethene (TCE) MCL was last exceeded in June 2012, but it increased from 3.5 ug/L in June to 6.6 ug/L in October (above the MCL of 5 ug/L).

In monitoring well MW-5, the PCE has been exceeded since monitoring began in 1995 and has trended downward from 650 ug/l in 1995 to the 100s in the 2000s and has been less than 100 ug/L since June 2013. TCE, 1,1,1-Trichloroethane (TCA) and Dichloroethene (DCE) MCLS were last exceeded in the 2003 – 2005 time frame. MW-5D exceeds the MCL for TCE and was found at 17 ug/L in October 2014. No other MCLs have been exceeded since PCE was found at 49 ug/L in June 2005.

MW-6 has only exceeded the PCE MCL and has been slightly below the MCL of 5 ug/L since December 2012. MW-7 regularly exceeds the MCL for PCE and the most recent result was 46 ug/L. The DCE MCL was last exceeded in December 2009 and the TCE MCL was last exceeded in December 2012.

MW-8 has regularly exceeded the PCE and TCE MCLs since testing began in 1995. PCE has come down from 200 ug/L in 2005 to a range of 61 to 72 ug/L since December 2011. MW-9 has not exceeded any MCL since April 2002 when it exceeded the PCE with a value of 12 ug/L. There have only been three detections since then. MW-HBR only exceeds the MCL for PCE which it has done since monitoring began in 1995. However it has generally trended downward from a high of 130 ug/L to the current lowest value of 45 ug/L.

Monitoring well DGW-1 is a three well nest – shallow (S), Intermediate (I) and Deep (D). No MCLS have been exceeded in DGW-1S. DGW-1I has exceeded MCLS for DCE, TCE, PCE, TCA and 1,2-Dichloroethane (DCA). The PCE MCL has not been exceeded since 2002 The DCA MCL has not been exceeded since 2005. The TCA was below the MCL in the December 2013 and June 2014 samples but spiked up to 420 ug/L in the October 2014 sample. DCE and TCE were found in October 2014 at 88 and 54 ug/L, respectively, which are increased values from those recently observed at this monitoring well.. DGW-1D exceeded MCLs for DCA, DCE and TCE. The Vinyl Chloride (VC) MCL had been exceeded in the last three sampling events but was below the MCL in the October 2014 event.

Downgradient monitoring well 2 (DGW-2) is also a three well nest (shallow, intermediate and deep) that has been sampled since 2012. There have been no MCL exceedances in these three wells.

Eight residential wells and one irrigation well were sampled in the October semiannual RCRA sampling event. There were no detections of any VOCs that can be detected by EPA Method 8260B, including all of the chemicals of concern at Central Wire.

3. **Upcoming Events/Activities Planned** – Central Wire will continue to operate the existing remediation systems.

Central Wire will locate Geoprobe sampling locations approximately 150 feet northwest of GP-8 and approximately 150 north of GP-19 and collect and analyze groundwater samples collected from 27 feet, 57 feet and 85 feet below the ground surface.

4. **Anticipated Problem Areas and Recommended Solutions** – None.

5. **Key Personnel Changes** – None.

6. **Target and Actual Completion Dates** – This project has not deviated from the project schedule.